What is claimed is:

1. An exhaust emission control apparatus for an internal combustion engine comprising:

an NOx catalyst adapted to occlude NOx when an oxygen concentration of an exhaust is higher than or equal to a predetermined value, and reduce said NOx occluded in said NOx catalyst in the existence of a reducing agent when the oxygen concentration of the exhaust is lower than said predetermined value;

a reducing agent supplying section for supplying said reducing agent to said NOx catalyst;

an SOx poisoning recovering section for recovering said NOx catalyst from its SOx poisoning by supplying said reducing agent through said reducing agent supplying section to vary the oxygen concentration of the exhaust passing through said NOx catalyst;

a hydrogen sulfide concentration estimating section for estimating a concentration of hydrogen sulfide in an atmosphere into which said hydrogen sulfide is discharged; and

an estimated concentration derived reducing agent supply amount control section for controlling an amount of reducing agent supplied from said reducing agent supplying section in such a manner that the amount of reducing agent to be supplied is decreased in accordance with the increasing concentration of hydrogen sulfide estimated by said hydrogen sulfide concentration estimating section while said NOx catalyst is recovered from the sulfur oxide poisoning.

2. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 1, wherein said hydrogen sulfide concentration estimating section estimates that the smaller the amount of the exhaust discharged from said internal combustion engine, the higher the

concentration of hydrogen sulfide in the atmosphere is.

3. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 1, wherein said exhaust emission control apparatus is installed on a vehicle, and said hydrogen sulfide concentration estimating section estimates that the lower a moving speed of said vehicle, the higher the concentration of hydrogen sulfide in the atmosphere is.

4. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 2, wherein said exhaust emission control apparatus is installed on a vehicle, and said hydrogen sulfide concentration estimating section estimates that the lower a moving speed of said vehicle, the higher the concentration of hydrogen sulfide in the atmosphere is.

5. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 1, wherein said hydrogen sulfide concentration estimating section estimates that the higher a concentration of sulfur in fuel, the higher the concentration of hydrogen sulfide in the atmosphere is.

6. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 2, wherein said hydrogen sulfide concentration estimating section estimates that the higher a concentration of sulfur in fuel, the higher the concentration of hydrogen sulfide in the atmosphere is.

7. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 3, wherein said hydrogen sulfide concentration estimating section estimates that the higher a concentration of sulfur in fuel, the higher the concentration of hydrogen sulfide in the atmosphere is.

8. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 4, wherein said hydrogen sulfide concentration estimating section estimates that the higher a concentration of sulfur in fuel, the higher the concentration of hydrogen sulfide in the atmosphere is.

9. The exhaust emission control apparatus for an internal combustion engine comprising:

an NOx catalyst adapted to occlude NOx when an oxygen concentration of an exhaust is higher than or equal to a predetermined value, and reduce said NOx occluded in said NOx catalyst in the existence of a reducing agent when the oxygen concentration of the exhaust is lower than said predetermined value;

a reducing agent supplying section for supplying said reducing agent to said NOx catalyst;

an SOx poisoning recovering section for recovering said NOx catalyst from its SOx poisoning by supplying said reducing agent through said reducing agent supplying section to vary the oxygen concentration of the exhaust passing through said NOx catalyst;

a concentration related value detecting section for detecting a value related to a concentration of hydrogen sulfide in an atmosphere into which said hydrogen sulfide is discharged while said SOx poisoning recovering section is recovering said NOx catalyst from its SOx poisoning; and

a concentration related value derived reducing agent supply amount control section for controlling an amount of reducing agent to be supplied in such a manner that when the value detected by said concentration related value detecting section raises the concentration of hydrogen sulfide in the atmosphere higher than a predetermined concentration, the amount of

reducing agent is decreased until the concentration of hydrogen sulfide in the atmosphere is decreased to or below said predetermined concentration.

10. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 9, wherein said concentration related value detecting section detects an amount of intake air sucked into said internal combustion engine, and when the amount of intake air sucked into said internal combustion engine at the time of said NOx catalyst being recovered from its SOx poisoning by said SOx poisoning recovering section is smaller than an amount of intake air with which the concentration of hydrogen sulfide in the atmosphere is made lower than said predetermined concentration, said concentration related value derived reducing agent supply amount control section decreases the amount of reducing agent to be supplied until the concentration of hydrogen sulfide in the atmosphere is decreased to or below said predetermined concentration.

11. The exhaust emission control apparatus for an internal combustion engine as set forth in claim 9, wherein said exhaust emission control apparatus is installed on a vehicle, and said concentration related value detection section detects a moving speed of said vehicle, and when the moving speed of said vehicle at the time of said NOx catalyst being recovered from its SOx poisoning by said SOx poisoning recovering section is lower than a moving speed of said vehicle at which the concentration of hydrogen sulfide in the atmosphere is made lower than said predetermined concentration, said concentration related value derived reducing agent supply amount control section decreases the amount of reducing agent to be supplied until the concentration of hydrogen sulfide in the atmosphere is decreased to or below said predetermined concentration.

12. The exhaust emission control apparatus for an internal combustion

engine as set forth in claim 9, wherein said concentration related value detection section detects a concentration of sulfur in fuel, and when said concentration of sulfur in the fuel is higher than a sulfur concentration at which the concentration of hydrogen sulfide in the atmosphere is made lower than said predetermined concentration, said concentration related value derived reducing agent supply amount control section decreases an amount of fuel to be supplied by a predetermined amount at the time of said NOx catalyst being recovered from its SOx poisoning.

13. An exhaust emission control method for an internal combustion engine comprising:

a first step of detecting a value related to a concentration of hydrogen sulfide in an atmosphere into which said hydrogen sulfide is discharged when a reducing agent is supplied so as to recover said NOx catalyst from its SOx poisoning; and

a second step for controlling an amount of reducing agent to be supplied in such a manner that when the value detected in said first step raises the concentration of hydrogen sulfide in the atmosphere higher than a predetermined concentration, the amount of reducing agent to be supplied is decreased by a predetermined amount so as to lower the concentration of hydrogen sulfide in the atmosphere to or below said predetermined concentration.

14. The exhaust emission control method for an internal combustion engine as set forth in claim 13, wherein in said first step, an amount of intake air sucked into said internal combustion engine is detected as the value related to the concentration of hydrogen sulfide in the atmosphere into which said hydrogen sulfide is discharged, and in said second step, when the amount of intake air sucked into said internal combustion engine is smaller than a prescribed amount, the amount of reducing agent to be

supplied is decreased by said predetermined amount so as to lower the concentration of hydrogen sulfide in the atmosphere to said predetermined concentration.

15. The exhaust emission control method for an internal combustion engine as set forth in claim 13, wherein in said first step, a moving speed of a vehicle is detected as the value related to the concentration of hydrogen sulfide in the atmosphere into which said hydrogen sulfide is discharged, and in said second step, when the moving speed of a vehicle is smaller than a prescribed speed, the amount of reducing agent to be supplied is decreased by said predetermined amount so as to lower the concentration of hydrogen sulfide in the atmosphere to or below said predetermined concentration.

16. The exhaust emission control method for an internal combustion engine as set forth in claim 13, wherein in said first step, a concentration of sulfur in fuel is detected as the value related to the concentration of hydrogen sulfide in the atmosphere into which said hydrogen sulfide is discharged, and in said second step, when the concentration of sulfur in the fuel is higher than a prescribed concentration, the amount of reducing agent to be supplied is decreased by said predetermined amount so as to lower the concentration of hydrogen sulfide in the atmosphere to or below said predetermined concentration.